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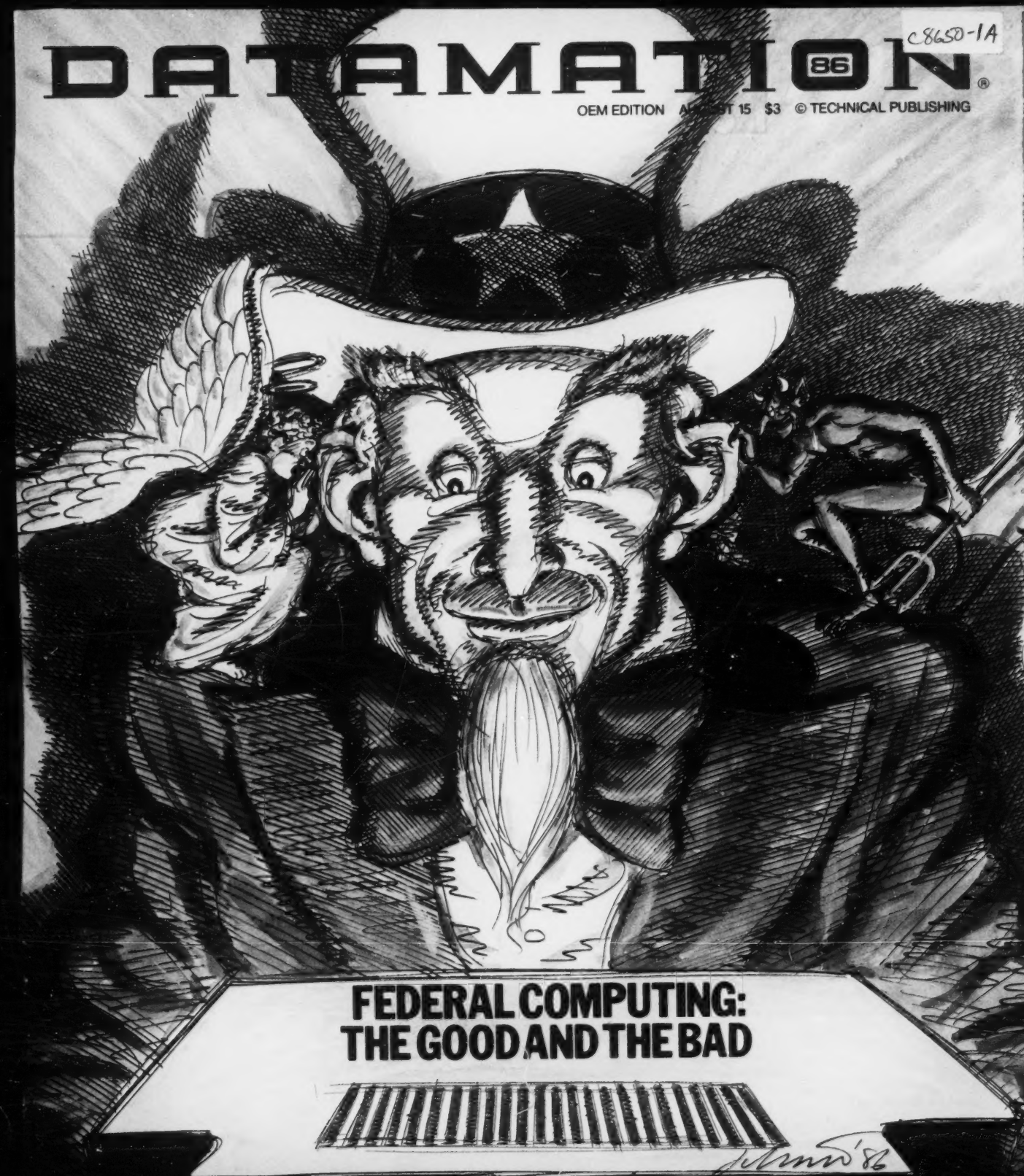

FEDERAL COMPUTING: THE GOOD AND THE BAD

AUTOMATION IN THE WHITE HOUSE
DP DOLLARS IN SDI
PERSONAL SUPERCOMPUTERS ARE COMING

DATAMATION

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OEM EDITION

A federal hunger for solutions instead of hardware spells opportunity for systems integrators.

SELLING TO THE FEDS

by Anne A. Armstrong

Selling computers and information technology to Uncle Sam is either a gold mine or a black hole, depending on who the vendor is. For many years, the procurement process seemed shrouded in a mystery that only a few enlightened companies were able to solve. But a number of changes have taken place in recent years that make it easier to sell to the federal government.

In general, third-party firms are the beneficiaries of these new ways of doing business with the feds, often representing major computer and communications manufacturers or becoming acquisition targets for those hardware makers that want to enter or remain in this market.

In 1984, Congress precipitated

sweeping changes in the federal procurement process with the Competition in Contracting Act and the Small Business and Federal Procurement Competition Enhancement Act. Both bills were designed to improve the contracting process by increasing competition for the government dollar.

Although figures differ depending on what is counted, the Vienna, Va.-based market research firm, Federal Sources Inc., estimates that U.S. government spending on information technology in fiscal year 1986 will total $15.3 billion. Equipment expenses alone are expected to be some $3 billion (see Fig. 1).

A potential market that big is a powerful attraction for vendors, particularly when the commercial sector of the industry is in a down cycle. But the bidding process for a large federal contract can require the commitment of considerable money and time just to stay in the game.

"The worst thing that can happen to a vendor is to finish in second place," says John Snook, marketing manager at Falcon Micro Systems, a Bethesda, Md., company that specializes in selling to the government. "In that case, you have made a huge investment in the process and have nothing to show for it. You want to win—or get thrown out early. That's one skill the federal marketing specialist should bring to the table: knowing whether to invest resources in bidding on a particular contract."

Among the changes brought about by the new contracting laws were appeals procedures for vendors who wish to protest contract awards, and a shift away from equipment specifications in contracts to "functional specifications." With functional specifications, the government states what it wants the proposed system to do, rather than detail the hardware and software to be provided. It is up to the vendor to analyze the technology and come up with the most cost-effective solution.

In addition to competitive contracting procedures, there are several other factors that have affected the way the government buys computers. Budget reductions have continued to cut away at the ranks of government computer personnel, and directives such as the Office of Management and Budget's long-standing policy on contracting out tends to encourage, if not require, that services be moved into the

ILLUSTRATION BY RICHARD ANDERSON

Revenues for the leading systems integrators grew 89% from fiscal year 1983 to fiscal year 1984.

private sector. In some cases, the federal government has been pressed even to find qualified technicians in the private sector to write its proposal requests and evaluate the bids that these requests elicit.

"The government is beginning to approach the bare minimum number of computer people required to operate effectively," says Robert A. Dornan, vice president of Federal Sources Inc. "The government spends one half of what private industry does on personnel."

So the government is changing the way it handles its computer purchases. In addition to putting the responsibility for system design on the vendors, in many cases, the government may also want the company to come in and run the installation once it is completed, according to Whit Dodson, a federal procurement specialist at International Data Corp.'s (IDC) Washington division.

NASA'S UNIFIED CONTRACT

An example of such an approach is a $685 million contract the National Aeronautics and Space Administration awarded to a group of suppliers headed by Rockwell International. This team of companies takes over what used to be 16 separate service contracts at the Johnson Space Center in Houston. Now the operation and maintenance of the mission control center, the software development, the central computing facility, and a collection of simulation labs are all combined into one massive service contract.

As the NASA contract indicates, the solution emerging from all the changes in contracting procedures is systems integration. The concept, which began in the aerospace industry and spread from the Department of Defense and NASA to other government agencies, is now used for most large awards. A systems integrator is often, but not always, a nonmanufacturer who selects hardware, buys software or has it written, arranges telecommunications, and combines all these components into one custom package.

The growing tendency within the government to combine telecommunications with computer contracts has hastened the trend. Distribution of the data is frequently part of the specifications. Since strictly hardware manufacturers may not have expertise in communications, they often seek other companies to join in bidding on contracts with telecommunications. More and more frequently, that partner will be a systems integrator.

IDC reports that revenues for the leading systems integrators grew 89% from fiscal year 1983 to fiscal year 1984 (see Fig. 2). Federal Sources Inc. notes, meanwhile, that systems integration within the federal government is growing at a rate of 50% per year. Estimates of the portion of the government's future computer system purchases that are candidates for systems integration bids range from one-quarter to one-half of the total.

FIG. 1

FEDERAL SPENDING ON INFORMATION TECHNOLOGY

INCLUDES COMPUTERS, TELECOMMUNICATIONS, ETC.
($ billions)

Total market		
	FY 84	12.2
	FY 85	13.8
	FY 86 (est.)	15.3
	FY 87 (est.)	16.4
Pure equipment purchases	FY 85	2.2
	FY 86 (est.)	2.7
	FY 87 (est.)	2.9
Leases		
	FY 85	1.1
	FY 86 (est.)	1.1
	FY 87 (est.)	1.1

Source: Federal Sources Inc.

FIG. 2

SELECTED SYSTEMS INTEGRATORS' FY 84 SALES TO THE GOVERNMENT
($ millions)

Computer Sciences Corp.	206
Electronic Data Systems	76
Federal Data Corp.	48
Martin Marietta Corp.	48
Planning Research Corp.	47

Source: Federal Sources Inc.

For major manufacturers and small companies alike, systems integration offers an opportunity to link up with other companies and form a team to bid on a particular contract. The systems integrator, which is the prime contractor on the job, selects the equipment believed to be most suitable for the application at hand.

Most integrators do not represent one manufacturer exclusively, but see each procurement opportunity as a new beginning for teaming agreements. "No manufacturer has a lock on new technology," says Daniel Young, president of Federal Data Corp., a Chevy Chase, Md., firm that specializes in federal systems integration. "The systems integrator needs the flexibility to search out new and better solutions."

Third parties, such as systems integrators, can be important sources of revenue to manufacturers. As part of a recent $223 million U.S. Department of Agriculture office automation contract awarded to General Motors's Electronic Data Systems unit, for example, nearly 80% of the funds ultimately will flow down to AT&T Information Systems as simple hardware buys, according to IDC.

Market analysts have estimated that Digital Equipment Corp. will receive some 15% of its total revenues from its oems selling to the government. Another 40% is expected to come from DEC acting as a subcontractor to prime contractors with federal contracts. A DEC spokesperson would not confirm those figures, saying only, "Digital is a large supplier to the government."

However, Dana Lajoie, technology development manager at DEC's government systems group in Merrimac, N.H., acknowledges that DEC will engage in more of what he calls "systemness" in order to integrate and provide more of a solution to its customers.

The shift in customer expectations is not confined to the government marketplace, says Lajoie. "Customers, in general, are expecting solutions. For years, we sold pieces and the customers are saturated with pieces. Now they want solutions, and they believe that should be the vendor's job."

Decisions to participate in a teaming agreement are made on a case-by-case basis, Lajoie adds. Among the considerations is whether the contract is something DEC would like to bid on as a prime. If the contract is primarily for computer systems, DEC would give more consideration to acting as a prime. If the project is primarily a radar system or a business communication system, then it would be more likely to go to a systems integrator. "Our business is to sell VAXs, not to act as project managers," he says.

IBM, whose equipment is included in the bids of many systems integrators, has several traditional sales units that sell to the government. It is not uncommon for a systems integrator to be bidding IBM equipment against IBM's own sales unit. Electronic Data Systems recently bid IBM equipment on a U.S. Immigration and Naturalization Services contract against an IBM division that was also bidding the company's equipment.

"Our success depends on how well the systems integrator does its job."

IBM executives, however, have sanctioned a new corporate entity called Complex Systems Organization. The new group's purpose is to behave as much as possible like an independent systems integrator. Industry observers say the new group will not be tied to IBM equipment and regulations as completely as are other IBM sales units.

Although it is the largest computer manufacturer, IBM does not sell the most computers to the government. That distinction belongs to Sperry Corp., which, according to the General Services Administration (GSA), increased its share of the federal data processing market from 19.9% in the first half of 1985 to 23.6% by year's end. Sperry has been revamping its corporate structure to become a full-fledged systems integrator. Exactly what effect Burroughs' purchase of Sperry will have on each company in this area is not yet clear. System Development Corp., which is already owned by Burroughs, is an active systems integrator in the federal marketplace.

In the meantime, Sperry is on a roll. It bid Amdahl computers on a large Federal Aviation Administration contract and won. And the company has added another big government contract to its list, winning the bid to supply the Army with Unix-based minicomputers. For this bid, dubbed CONUS Mini, for Continental United States minicomputers, Sperry teamed with Arete Systems Group of San Jose to supply up to 1,800 Model 5000/80 minis.

Amdahl, which is Sperry's partner on the FAA contract, sees its role changing to that of subcontractor more often than not. "There's no question the government is looking for one entity to do business with," says Jim Brunning, Amdahl's federal district manager. "Typically, our portion of the bid is not the majority, so we must be very selective about who we do business with. Our success depends on how well the systems integrator does its job."

Brunning sees an increasingly competitive federal marketplace. "Very definitely, the environment has changed. We see many more vendors looking to the federal market, particularly third-party leasing firms."

At the direction of Congress, federal purchasing has shifted from a heavy lease base to purchase only (see Fig. 1). Federal Data's Young says the turnaround was swift. "In 1984," he says, "we saw 80% of the contracts go as leases and 20% as purchases. This year, so far, purchases have accounted for 85% to 90% of the contracts."

Other companies, such as Xerox Corp., are eager to increase their presence in the federal marketplace. Xerox has just purchased a minority stake in systems integrator Federal Data Corp. The two companies expect that FDC's expertise will permit Xerox to break into the federal market with its electronic publishing products and artificial intelligence systems.

For a company trying to move into federal sales, Falcon Micro Systems' Snook says the fastest entry is made by convincing a systems integrator to include a product on a bid. Sybase Inc. of Berkeley, Calif., which has a relational database that won't even be introduced until the third quarter of 1986, already has an agreement for TRW's Defense Products and Information Systems Groups to use the product.

MAKING SALES TO THE FED

Other ways of selling to the government include small sales (less than $50,000), which can be done by getting into GSA's schedule program. Here, vendors, their products, and their prices are preapproved by the central purchasing agency. Other federal agencies then order what they need from these schedules.

Not all firms see the government as a desirable customer, however. Officials at one small computer dealer in the suburban Washington area say they try to avoid selling to the government. "GSA takes the point of view that the government is any manufacturer's biggest dealer," says one of the officials, "so they believe the government should get wholesale prices. But on top of that, they want handholding. Every time someone new works with a machine you sold the government, they call up and want you to tell them how to work it. You can't make any money on sales like that.

"It's a big mistake to think that if you can break even on the hardware, the agency will come back to you to buy ribbons and disks," the dealer continues. "Supplies are sold on a separate contract to the lowest bidder. I read about all the government waste, but it's hard to find in small computer sales."

This sentiment is echoed for larger systems, as well. "The government has a lot of people who exist to make vendors jump through hoops," says Snook. The systems integrator's job is to become an expert on hoop manuevering. ◉

CARTOON BY SIDNEY HARRIS

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